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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/607,205	06/29/2000	Tetsujiro Kondo	112857-104	6606
29175	7590	04/08/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC			LEE, RICHARD J	
P. O. BOX 1135			ART UNIT	PAPER NUMBER
CHICAGO, IL 60690-1135			2613	<i>[Handwritten 15]</i>
DATE MAILED: 04/08/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/607,205	KONDO, TETSUJIRO	
	Examiner Richard Lee	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 15 January 2002.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 17-29,63-75 and 123-141 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 17-21,23-29,63-75,123-127,129-136 and 140 is/are allowed.
 6) Claim(s) 22,128,137-139 and 141 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 14.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____

1. The Examiner wants to point out that the applicant's arguments from the amendment filed January 15, 2002 have been noted and considered, but are deemed moot in view of the following grounds of rejections.
2. The drawings are objected to under 37 CFR 1.83(a) for the same reasons as set forth in paragraph (2) of the last Office Action (see Paper no. 5) since the applicant has failed to address this item.
3. Claims 22 and 128 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For examples:

- (1) claim 22, line 9-10, "the coded data" shows no clear antecedent basis;
- (2) claim 128, lines 6-9, the phrase "**predicting image data of the second hierarchy where a number of pixels for the image data of the first hierarchy for learning using the image data of the first hierarchy for learning** and mapping coefficients corresponding to the class information" as claimed is vague and indefinite since it is not particularly understood what is meant/claimed with respect to the bolded phrase above; and
- (3) claim 128, line 11, after "coded", "image" should be properly inserted in order to provide proper antecedent basis for the same as specified at claim 123, line 1.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 137-139, and 141 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 5, 33, 38, and 56 of U.S. Patent No. 6,198,770. Although the conflicting claims are not identical, they are not patentably distinct from each other because application claims 137-139, and 141 are broader than patented claims 5, 33, 38, and 56, respectively.

6. Claims 22 and 128 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

7. Claims 17-21, 23-29, 63-75, 123-127, 129-136, and 140 are allowed.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kondo (5,517,588) discloses a digital data conversion equipment.

9. The following is an Examiner's Statement of Reasons for Allowance:

Claims 7-29, 63-75, and 123-141 are considered allowable over the prior art of record because the prior art of record does not particularly suggest, disclose, or teach (a) an apparatus

for performing a hierarchy coding comprising means for storing mapping coefficients for each class, and means for reading mapping coefficients corresponding to the class information and predicting image data of a second hierarchy using the image data of the first hierarchy and the read mapping coefficients, the image data of the second hierarchy having a number of pixels which is smaller than that of the image data of the first hierarchy as claimed in claim 17; the corresponding method and method steps as claimed in claims 63 and 123, respectively; and the corresponding article of manufacture with the corresponding steps as claimed in claim 130; (b) an apparatus for decoding a coded data hierarchical coding an image data comprising wherein the coded data is generated by extracting a plurality of pixels of an image data of a first hierarchy and generating class information corresponding to characteristics of the extracted plurality of pixels, and reading mapping coefficients corresponding to the class information from a memory in which mapping coefficients for each class are stored and predicting an image data of the second hierarchy using the image data of the second hierarchy having a number of pixels which is smaller than that of the image data of the first hierarchy as claimed in claim 24; and the corresponding method and method steps as claimed in claim 70; (c) an apparatus for performing a hierarchical coding, comprising means for correcting the image data of the second hierarchy and generating a corrected data, means for predicting the image data of the first hierarchy in accordance with the corrected data and generating a predicted data of the first hierarchy having a plurality of predicted pixels, means for calculating predictive error of the predicted data of the first hierarchy with respect to the image data of the first hierarchy ;and means for determining suitability of the corrected data in accordance with the predicted error as claimed in claim 137; and the corresponding method and method steps as claimed in claim 139; (d) a method of

decoding data represented by a hierarchical coding of an image comprising decoding the image data of the first hierarchy from image data of the second hierarchy by the steps of forming the image data of the second hierarchy and generating a corrected data, predicting the image data of the first hierarchy in accordance with the corrected data and generating a predicted data of the first hierarchy having a plurality of predicted pixels, calculating a predicted error of the predicted data of the first hierarchy with respect to the image data of the first hierarchy, determining suitability of the corrected data in accordance with the predicted error, and repeating the step of generating corrected data as necessary until the corrected data becomes an optimum corrected data as claimed in claim 140; and (e) an apparatus for performing a hierarchical coding comprising means for correcting the image data of the third hierarchy and generating a corrected data of the third hierarchy, first predicting means for generating a prediction value of the second hierarchy, having a plurality of pixels, in accordance with the corrected data of the third hierarchy, second predicting means for generating a prediction value of the first hierarchy, having a plurality of pixels, in accordance with the prediction value of the second hierarchy, error generating means for generating a predicted error of the prediction value of the first hierarchy with respect to the image data of the first hierarchy, and means for determining suitability of the corrected data of the third hierarchy in accordance with the predicted error as claimed in claim 138; and the corresponding method and method steps as claimed in claim 141.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.



RICHARD LEE
PRIMARY EXAMINER

Richard Lee/rl
4/2/04